

Prospectus for a Symposium on Land Use

Sept 22-25, 2000
Mammoth Hot Springs, WY

Title: Changing Landscapes of Rural America

Scope:

Rural areas in the United States are changing as the country transitions to a service and information economy. The size and character of the populations of rural areas are changing rapidly, as are their livelihoods. These socioeconomic trends are dramatically altering patterns of land use and land cover, with important consequences for ecosystems and human communities. To understand the causes and consequences of these changes, a multidisciplinary approach is needed to involve social scientists, ecologists, geospatial technology specialists, and land managers.

Objectives:

1. Synthesize the current state of knowledge on the trends, causes, consequences, and management approaches of land use change in rural America.
2. Identify new research, tools, and approaches that would help policy-makers better meet their objectives for rural landscapes.
3. Develop a network of scientists and policy-makers focusing on land use change in rural American landscapes.

Organizers: Andy Hansen and Dan Brown

Products:

1. Complete workshop proceedings published on the internet.
2. Review/synthesis paper for outlet like BioScience.
3. Network of scientists interested in communications and interactions on the topic.

Format: Two-day workshop with presentations and directed panel discussions on major topics, plus field trips.

Participants: Invited scientists, managers, and policy-makers and other interested parties.

Funding Sources: NASA LCLUC, Montana NASA EPSCoR, Montana State University.

Draft Agenda

Fri Sept 22

- 12:30 All arrive at Bozeman Airport and board bus
- 1:00-6:30 Field Trip to Yellowstone National Park via West Yellowstone, MT.
(Speakers/discussion leaders: Kurt Alt, Richard Aspinall, Dennis Glick, Lisa Graumlich, Jerry Johnson, Bruce Maxwell, Ray Rasker, Jay Rotella, others)
- 7:00 Cocktails and dinner at Mammoth, YNP.

Sat Sept 23

- 7:00-8:00 Breakfast in Map Room

I. Introduction

- 8:00-8:30 Daniel Brown (Univ of Michigan) - Land use, ecology, and society: the current frontier

II. Land Use Trends and Rates

- 8:30-9:00 Kenneth Johnson - Past pop growth, migration to rural areas, future projections.
- 9:00-9:30 Rick Knight (Colorado State Univ) – Exurban Development and Recreation
- 9:30-10:00 Steve Archer (Texas AM) – Woody plant encroachment

- 10:00-10:30 Break

III. Conceptual Underpinnings

- 10:30-11:00 Michael Huston (Oak Ridge National Lab) - The environmental basis of human society
- 11:00-11:30 Tom Powers (Univ Montana) - Ecology, socioeconomics, and land use
- 11:30-12:00 William Riebsame (Univ Colorado) - Drivers of change in the New West
- 12:00-12:30 Robert Walker - Linking social and economic systems with land use change.

- 12:30-1:30 Lunch

- 1:30-2:30 Breakout Groups
Introduce group objectives, approach, key questions

IV. Ecological and Socioeconomic Causes and Consequences: Case Studies

- 2:30-3:00 David Foster (Harvard Univ) - New England

- 3:00-3:30 Andy Hansen (Montana State Univ) - Greater Yellowstone
- 3:30-4:00 David Theobald (Colorado State Univ) - Colorado Rockies
- 4:00-4:30 Daniel Brown (Univ. Michigan) - Upper Midwest
- 4:30-5:00 Tom Evans (Indiana State Univ)- Midwest

- 7:00 Buffet dinner

- 8:30 Garik Gutman (NASA) - NASA Land Cover Land Use Change Program
- Greg Keiller (Montana State University) - Humorist

Sun Sept 24

- 7:00-8:00 Breakfast in Map Room
- 8:00-10:00 Breakout Groups

V. Decision Support: Observing, Predicting, and Visualizing Land Use Change

- 10:00-10:30 Tom Loveland (EROS)– remote sensing based monitoring efforts
- 10:30-11:00 Tom Spies (USFS PNW Research Station) - Modeling alternative forest management policies in the Oregon Coast Range
- 11:00-11:30 Will Orr (Prescott Collge) - Simulation and visualization of policy, hydrologic, and land use interactions
- 11:30-12:00 Bruce Maxwell (Montana State Univ) - Simulating land use change in an agricultural landscape

- 12:00-1:00 Lunch

VI. Managing Land Use

- 1:00-1:30 Virginia Dale (Oak Ridge National Lab) - Ecological guidelines for land use management
- 1:30-2:00 Mike Finley or John Varley (Yellowstone National Park) - Managing nature reserves in the context of surrounding private lands
- 2:30-3:00 Ray Rasker (Sonoran Institute) - Community approaches to track socioeconomic change
- 3:00-3:30 Joan Nassauer (U Mich) - Alternative designs for human communities.

VII. Synthesis and Conclusions

- 3:30-5:15 Breakout Group Summaries

- 5:15-5:30 Andy Hansen - Closing Comments

- 7:00 Group dinner and outing

Mon Sept 24

8:00-11:30 Breakfast in Chico and return to Bozeman Airport